



Commonwealth of Massachusetts

## RIVERWAYS PROGRAM

*Building Partnerships, Protecting Rivers*

# MASSACHUSETTS RIVER RESTORE PROGRAM: DAM REMOVAL

River Restore is dedicated to facilitating, promoting, and implementing river and stream restoration in Massachusetts. An effective restoration technique to restore rivers and streams is to remove old and obsolete dams.



**2000** Silk Mill Dam, Yokum Brook, Becket



**2003** Silk Mill Dam removed and Yokum Brook restored

## DAMS IN MASSACHUSETTS

More than 3,000 dams fragment rivers and streams in Massachusetts – more than one for every three miles of river. Most dams were constructed before 1900 for water supply, industrial mill use, power supply, and recreation.

Federal, state, municipal, and private owners share ownership of these dams. Private dam owners may not be aware of their financial and legal responsibilities for dam safety and may not have planned adequately for maintenance, repair, or removal of their dams.

Of the more than 3,000 dams, approximately 350 are rated as High Hazard, approximately 748 are rated as Significant Hazard and the rest are rated as Low Hazard. High Hazard and large size dams pose the greatest threat to life and property. Low Hazard and small size dams may be the greater threat to the environment by blocking fish passage and impairing water quality.

## BENEFITS OF DAM REMOVAL:

- ✓ reduces liability concerns for dam owners, and can eliminate public safety hazards
- ✓ prevents uncontrolled dam breaches, ensuring public and environmental safety
- ✓ restores river habitat and improves fish passage and movement (eliminates the need and cost of fishway operation and maintenance)
- ✓ improves water quality and restores natural water temperatures and oxygen levels
- ✓ restores threatened and endangered species
- ✓ improves sediment transport, by restoring natural water velocities and depths
- ✓ restores and re-connects floodplain and bordering vegetated wetlands
- ✓ saves taxpayers dollars and increases tourism
- ✓ improves public access to the river and eliminates navigational hazards

**RIVER RESTORE IS** dedicated to reconnecting natural and cultural river communities through selective removal of dams and other obstructions. By building interagency communication and cooperation and a network of services for communities and others, RIVER RESTORE achieves ecological restoration and respects concerns for public safety and historic preservation.

**RIVER RESTORE IS NOT** a campaign to remove all dams. There are dams that are serving important purposes and should be maintained. But many dams are no longer serving their original purpose and/or are public safety hazards. The de-construction cost of removing these dams is often less than repairing them.

## MASSACHUSETTS RIVERS RESTORED THROUGH DAM REMOVAL

- In 2000, the **Old Berkshire Mill Dam** on the East Branch of the Housatonic River in Dalton was removed, doubling the habitat available to the coldwater trout fishery.
- In 2002, the **Billington Street Dam** restored passage for anadromous fish in Town Brook in Plymouth in the first coastal dam removal in Massachusetts.
- In 2003, the Yokum Brook Restoration Project removed the **Silk Mill Dam** from Yokum Brook, a tributary to the West Branch of the Westfield River in the town of Becket, restoring five miles of coldwater fisheries habitat by eliminating a barrier to Atlantic salmon migration and the movement of resident trout and other coldwater species.
- In 2006 **Upper Cooks Canyon Dam**, Galloway Brook, Barre and **Robbins Dam**, Red Brook, Wareham were removed for habitat benefit and to promote stream continuity. These two projects were completed in partnership with Mass Audubon, The Trustees of the Reservations and Trout Unlimited.

**Many other projects are underway statewide in conjunction with community based and local, state, federal partners.**

## PROGRAM SERVICES

**Technical Assistance** - River Restore is developing methodologies and guidelines for sampling and managing impounded sediments, working in partnership with the U.S. Geological Survey with funding from the Massachusetts Department of Environmental Protection and Department of Conservation and Recreation.

**Permit Guide and Factsheets** - River Restore is managing development of a guide to the regulatory requirements for dam removal and fact sheets about the process of dam removal.

**Policy and Funding** - River Restore is identifying opportunities to provide incentives for proactive restoration projects involving dam removal and has identified potential funding sources.

## PROGRAM ACTION STEPS

- ☐ **PRIORITIZE** stream segments for restoration using ecological, public safety and local interest criteria.
- ☐ **INVENTORY AND MAP** dam locations, complementing the DCR Dam Safety database.
- ☐ **DEVELOP** an Index of Environmental Risk to prioritize dams that threaten and impact environmental resources (funded by the MA Environmental Trust).
- ☐ **ASSIST** municipalities, agencies, and private dam owners with regulatory, funding and outreach strategies
- ☐ **RESPECT** historic, cultural, and recreational uses and values.
- ☐ **COOPERATE** with participating regulatory and management agencies to ensure timely and appropriate decisions.
- ☐ **OUTREACH** to interested individuals and groups about factors influencing the decision-making process for dam removal.

***For more information on dam removal projects and to download fact sheets about dam removal permitting and funding visit: [www.massriverways.org](http://www.massriverways.org)***

## River Restore - Riverways Program

Tim Purinton, Restoration Planner [617-626-1542] [tim.purinton@state.ma.us](mailto:tim.purinton@state.ma.us)

<http://www.massriverways.org>

Department of Fish and Game

251 Causeway St. Suite 400; Boston, MA 02114

Ian A. Bowles, Secretary  
**Executive Office of Environmental Affairs**

Mary B. Griffin, Commissioner  
**Department of Fish and Game**

Joan Kimball, Director  
**Riverways Program**